PTO/SB/08A (07-06)

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Sheet

## INFORMATION DISCLOSURE STATEMENT BY APPLICANT

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of

(Use as many sheets as necessary)

Complete if Known **Application Number** 10/658,977 Filing Date September 10, 2003 First Named Inventor Jack C. Wybenga 2189 Art Unit Reginald Glenwood Bragdon **Examiner Name** 2003.09.014.BN0 Attorney Docket Number

	T 0:-			DOCUMENTS	
Examiner Initials*	Cite No. <sup>1</sup>	Document Number  Number-Kind Code <sup>2 (# known)</sup>	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
	<del>                                     </del>	US- 5,471,593	11/28/1995	Branigin	3
		<sup>US-</sup> 5,781,772	07/14/1998	Wilkinson, III et al.	
	-	<sup>US-</sup> 5,857,196	01/04/1999	Angle et al.	
		<sup>US-</sup> 6,011,795	01/04/2000	Varghese et al.	
		<sup>US-</sup> 6,014,659	01/11/2000	Wilkinson, III et al.	
_	_	<sup>US-</sup> 6,067,574	05/23/2000	Tzeng	
		<sup>US-</sup> 6,079,006	06/20/2000	Pickett	
		<sup>US-</sup> 6,178,135	01/23/2001	Kang	
		<sup>US-</sup> 6,209,020	03/27/2001	Angle et al.	
		<sup>US-</sup> 6,212,184	04/03/2001	Venkatachary et al.	
		<sup>US-</sup> 6,275,927	08/14/2001	Roberts	
		<sup>US-</sup> 6,385,649	05/07/2002	Draves et al.	
		<sup>US-</sup> 6,403,527	08/06/2002	Waters et al.	
		<sup>US-</sup> 2002/0147721	10/10/2002	Gupta et al.	
		US- 2002/0146009	10/10/2002	Gupta et al.	
		<sup>US-</sup> 2002/0159466	10/31/2002	Rhoades	
		<sup>US-</sup> 6,522,632	02/18/2003	Waters et al.	
		<sup>US-</sup> 6,560,610	05/06/2003	Eatherton et al.	
		<sup>US-</sup> 6,571,313	05/27/2003	Filippi et al.	

Examiner Initials*	Cite No.1	Foreign Patent Document	Publication Date	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages			
		Country Code <sup>3</sup> -Number <sup>4</sup> -Kind Code <sup>5</sup> (if known)		MM-DD-YYYY			Or Relevant Figures Appear	1
		EP 0 408 188 A2	01/16/1991					
		WO 98/41931 A1	09/24/1998					
		EP 1 168 723 A2	01/02/2002					
		WO 01/63852 A1	08/30/2001					
			-					

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Jack C. Wybenga

2189

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Art Unit

First Named Inventor

**Examiner Name** 

## INFORMATION DISCLOSURE STATEMENT BY APPLICANT

(Use as many sheets as necessary)

Reginald Glenwood Bragdon Sheet 2 2003.09.014.BN0 Attorney Docket Number of |4

Examiner Initials*	Cite No.1	Document Number	Publication Date	Name of Patentee or	Pages, Columns, Lines, Where
	NO.	Number-Kind Code <sup>2 (# known)</sup>	MM-DD-YYYY	Applicant of Cited Document	Relevant Passages or Relevan Figures Appear
		<sup>US-</sup> 6,581,106	06/17/2003	Crescenzi et al.	
_		<sup>US-</sup> 6,614,789	09/02/2003	Yazdani et al.	
		<sup>US-</sup> 2003/0174717	09/18/2003	Zabarski et al.	
		<sup>US-</sup> 6,631,419	10/07/2003	Greene	
		<sup>US-</sup> 2003/0236968	12/25/2003	Basu et al.	
		<sup>US-</sup> 6,691,171	02/10/2004	Liao	
		<sup>US-</sup> 6,691,124	02/10/2004	Gupta et al.	
· <del>-</del> - · · · · · · · · · · · · · · · · · ·		<sup>US-</sup> 6,697,363	02/24/2004	Carr	
		<sup>US-</sup> 6,711,153	03/23/2004	Hebb et al.	
-		<sup>US-</sup> 6,728,732	04/27/2004	Eatherton et al.	
		<sup>US-</sup> 6,731,644	05/04/2004	Epps et al.	
		<sup>US-</sup> 2004/0100960	05/27/2004	Mehta	
		<sup>US-</sup> 2004/0107295	06/03/2004	Herkersdorf et al.	
		<sup>US-</sup> 2004/0105442	06/03/2004	Ko et al.	
-		<sup>US-</sup> 2004/0111395	06/10/2004	Rajgopal et al.	
		<sup>US-</sup> 2004/0109451	06/10/2004	Huang et al.	
		<sup>US-</sup> 6,772,268	08/03/2004	Kristiansen et al.	
		<sup>US-</sup> 6,782,382	08/24/2004	Lunteren	
		<sup>US-</sup> 6,839,830	01/04/2005	Liu	

		FORE	<b>IGN PATENT DOCU</b>	MENTS		
Examiner Initials*	Cite No.1	Foreign Patent Document	Publication Date	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages	
		Country Code <sup>3</sup> Number <sup>4</sup> Kind Code <sup>5</sup> (if known)	MM-DD-YYYY		Or Relevant Figures Appear	T <sup>6</sup>
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Complete if Known Substitute for form 1449/PTO **Application Number** 10/658,977 Filing Date September 10, 2003 INFORMATION DISCLOSURE Jack C. Wybenga First Named Inventor STATEMENT BY APPLICANT Art Unit 2189 (Use as many sheets as necessary) Reginald Glenwood Bragdon **Examiner Name** 2003.09.014.BN0 Sheet 3 **Attorney Docket Number** of 4

			U. S. PATENT	DOCUMENTS	
Examiner nitials*	Cite No. <sup>1</sup>	Document Number  Number-Kind Code <sup>2 (# known)</sup>	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		<sup>US-</sup> 6,859,455	02/22/2005	Yazdani et al.	
		<sup>US-</sup> 6,888,838	05/03/2005	Ji et al.	
		<sup>US-</sup> 2005/0055339	03/10/2005	Richardson	
	_	<sup>US-</sup> 6,928,430	08/09/2005	Chien et al.	
		<sup>US-</sup> 6,934,252	08/23/2005	Mehrotra et al.	
		<sup>US-</sup> 7,099,881	08/29/2006	Richardson et al.	
		<sup>US-</sup> 7,017,021	03/21/2006	Gupta et al.	
		<sup>US-</sup> 2006/0101130	05/11/2006	Adams et al.	
		<sup>US-</sup> 7,058,725	06/06/2006	Mathew et al.	
<u> </u>		<sup>US-</sup> 7,099,881	08/29/2006	Richardson et al.	
		<sup>US-</sup> 7,162,481	01/09/2007	Ricahrdson et al.	
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FOREIGN PATENT DOCUMENTS							
Examiner Initials*	Cite No.1	Foreign Patent Document	Publication Date	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages	Γ	
		Country Code <sup>3</sup> -Number <sup>4</sup> -Kind Code <sup>5</sup> (if known)	MM-DD-YYYY		Or Relevant Figures Appear		
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Substitute for form 1449/PTO	Complete if Known		
Substitute for form 1440/1 10	Application Number	10/658,977	
INFORMATION DISCLOSURE	Filing Date	September 10, 2003	
STATEMENT BY APPLICANT	First Named Inventor	Jack C. Wybenga	
(Use as many sheets as necessary)	Art Unit	2189	
(Ose as many sincets as necessary)	Examiner Name	Reginald Glenwood Bragdon	
Sheet 4 of 4	Attorney Docket Number	2003.09.014.BN0	

		NON PATENT LITERATURE DOCUMENTS		
Examiner Initials*	Cite No.1 Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title No.1 the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-is number(s), publisher, city and/or country where published.			
		Masami Shishibori, et al., "A Key Search Algorithm Using the Compact Patricia Trie", October 1997, 1997 IEEE International Conference on Intelligent Processing Systems, pgs. 1581-1584.		
		Miguel A. Ruiz-Sanchez, et al., "Survey and Taxonomy of IP Address Lookup Algorithms", IEEE Network, March/April 2001, pg. 8-23.		
		Stefan Nilsson, et al., "IP-Address Lookup Using LC-Tries", IEEE Journal on Selected Areas in Communications, IEEE Inc., June 1999, pp. 1083-1092, Vol. 17, No. 6, New York, U.S.		
		Andreas Moestedt, et al., "IP Address Lookup in Hardware for High-Speed Routing," IEEE Hot Interconnects VI, August 1998, pp. 31-39.		
		K.J. Christensen, et al., "Local area network-Evolving from shared to switched access," IBM Systems Journal, Vol. 34, No. 3, 1995, pg. 1-9.		
		European Search Report dated December 10, 2007 issued in connection with European Patent Application No. EP 03 25 7666.		
		Mikael Degermark, et al., "Small Forwarding Tables for Fast Routing Lookups", 1997 ACM, PG. 3-14.		
		Butler Lampson, et al., "IP Lookups Using Multiway and Multicolumn Search", IEEE/ACM Transactions on Networking, Vol. 7, No. 3, June 1999, pg. 324-334.		
		Henry Hong-Yi Tzeng, et al., "On Fast Address-Lookup Algorithms", IEEE Journal on Selected Areas in Communications, Vol. 17, No. 6, June 1999, pg. 1067-1082.		

Examiner		Date	
Signature		Considered	

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